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EXAMINER

THOMPSON, JAMES A

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2624

DATE MAILED: 06/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/852,301

Applicant(s)

KINJO, NAOTO

Examiner

James A. Thompson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 April 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) _____ is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 September 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 11 April 2005 have been fully considered but they are not persuasive.

Regarding page 7, line 11 to page 8, line 5: Examiner has actually cited column 16, lines 8-14 of Hayashi (US Patent 6,271,934 B1); column 16, lines 19-24 of Hayashi; column 16, lines 33-42 of Hayashi; and column 17, lines 4-9 of Hayashi during the course of fully explaining how the limitation disputed by Applicant is taught by the Hayashi reference. Applicant is relying solely on column 17, lines 4-9 of Hayashi in an attempt to show that Hayashi does not teach the limitation in dispute. Column 16, lines 8-14 of Hayashi clearly states: "Keys for [TARGET UPDATING (IN COPYING OPERATION)] shown in FIG. 12 are operated to update the reference data used to correct the conversion table in the copying operation. Keys for [TARGET UPDATING (IN PRINTING OPERATION)] shown in FIG. 12 are operated to update the reference data used to correct the conversion table in the printing operation." Thus, the image correction conditions can clearly be changed. Therefore, there is clearly a plurality of image correction conditions of different intensities. Furthermore, column 16, lines 19-24 of Hayashi states: "After the conversion table is corrected, the former conversion table which is not corrected is memorized. As a result, if the user is not pleased with the quality of an image formed using the conversion table which is corrected, the conversion table which is corrected can be changed to the former conversion table which is not corrected." Again, it is clear from the teachings of Hayashi that there is a plurality of image

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correction conditions of different intensities, specifically the different conversion tables which may be selected by the user, being set with respect to the verbal expression. Actually, in Hayashi, the conditions are set with respect to an input. Bernardi (US Patent 6,021,278) is relied upon to teach input using verbal expressions. The corresponding teaching, along with the associated motivation to combine the references, is given on page 3, lines 5-17 of the previous office action, dated 06 December 2004, and is also given in the arguments regarding claim 2 below.

Regarding page 8, line 6 to page 9, line 5: The image correction condition can be updated more than once. The accumulation of updates of the image correction condition results in the claimed totalization. For example, the user selects to perform image correction based on an image correction condition. The user views the results of the first image correction. The user then updates the image correction condition. The user then views the new results given by the second image correction condition. If the user approves of the results, the current image correction conditions are either set as the resultant image corrections or updated in an attempt to achieve better results. If not, the user reloads the previous image correction conditions and then performs a different update to the image correction conditions. This process is repeated until the user is fully satisfied. The result of performing this process is the claimed totalization.

Regarding page 9, lines 6-17: Wong (US Patent 6,557,102 B1) clearly teaches sorting image scenes of images (column 5, lines 29-32 of Wong) by using image characteristic values of the image (column 5, lines 49-53 and lines 57-59 of Wong). The

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image data is formed and assembled according to a specific type of archive (column 5, lines 29-32 of Wong) which is organized based on image characteristic values, such as identification number, date, name, et cetera (column 5, lines 49-53 and lines 57-59 of Wong).

Regarding page 9, line 18 to page 10, line 8: It has already been clearly explained on page 6, line 27 to page 7, line 3 of the previous office action, dated 06 December 2004, how Wong clearly teaches the limitations of claim 5. Due to the language of claim 5, only one of the listed criteria by which the images are sorted need be present in the references to fully teach that particular limitation. Wong teaches at least that the images are sorted according to the laboratory store and/or the individual printer used since the hospital identification number is given (column 5, lines 57-59 of Wong) and the acquisition computers are proximate to the locations where the imaging occurs (column 3, lines 52-57 of Wong). Thus, Wong teaches the limitations of claim 5.

Regarding page 10, line 9 to page 11, line 5: Examiner also has cited figure 12 of Hayashi to demonstrate that a plurality of image correction conditions can be set. In particular, as clearly shown in figure 12 of Hayashi, multiple possibilities exist: Execute Copying correction, Use Previous Value for Copying, Execute Printing correction, Use Previous Value for Printing, Execute Background Correction, Do Not Execute Background Correction, Execute Correction of Higher Density Portion, and Do Not Execute Correction of Higher Density Portion. Thus, there are a plurality of image correction conditions that can be set.

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Regarding page 11, lines 6-14: Hisatake (US Patent 5,669,040) teaches that the number of times a type of job, and thus a particular type of image processing, is performed is totalized. Clearly, the type of image processing performed by a printer is different than the type of image processing performed by a fax machine. By combining Hisatake with Hayashi in view of Bernardi, the combination teaches that a number of each of the plurality of different types of image correction conditions taught by Hayashi is totalized. It is the *combination* of Hisatake with Hayashi in view of Bernardi that fully teaches the limitations of claim 6, not Hisatake alone.

Regarding page 11, line 15 to page 12, line 13: Examiner did not give official notice that switching between a verbal input mode and a numerical input mode is old, well-known and expected in the art. Examiner respectfully directs Applicant to the text of the official notice given on page 10, lines 19-27 of said previous office action. Examiner specifically stated: **"Official notice is given that *switching between two modes of input is old, well-known and expected in the art.* At the time of the invention, it would have been obvious to a person of ordinary skill in the art to switch between said verbal input mode taught by Bernardi and said numerical input mode taught by Hayashi. The motivation for doing so would have been have multiple possible ways of entering data, depending upon user preference, in case one form of input does not work well for a particular user or in particular circumstances."** [emphasis added] Thus, it is by combination that switching between a verbal input mode and a numerical input mode is taught by Hayashi in view of Bernardi and well-known prior art.

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Further, the motivation to combine the teachings of the well-known prior art would have been well within the knowledge one of ordinary skill at the time of the invention. Is Applicant suggesting that "hav[ing] multiple possible ways of entering data, depending upon user preference, in case one form of input does not work well for a particular user or in particular circumstances", which is the motivation provided in said previous office action and also provided below, is a novel approach only disclosed by Applicant? Indeed, such an approach is clearly old and well-known and one of ordinary skill in the art at the time of the invention would easily have seen the benefit in having multiple types of input means available for the use of the operator. Further, since Applicant alleges that Examiner is using impermissible hindsight, and thus must allegedly be relying only upon Applicant's present disclosure, Examiner requests clarification as to where exactly in Applicant's present disclosure the provided motivation for combining the well-known prior with Hayashi in view of Bernardi is given. Examiner has been unable to find such motivation in Applicant's present disclosure.

Although it is noted by Examiner that Applicant has not therefore questioned the validity of the actual official notice that was given in said previous office action, but has merely mischaracterized said official notice, Examiner will however provide references which clearly demonstrates that "switching between two modes of input is old, well-known and expected in the art." Vonusa (US Patent 4,274,092, patented 16 June 1981) teaches entering data either through the use of a keyboard or the use of a voice recorder which then uses automatic speech recognition, depending upon the preference of the user (column

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1, lines 38-43 of Vonusa). Galbreath (US Patent 4,539,701, patented 03 September 1985) teaches an operator selectively switching between the use of a keyboard and a voice recognition input device (column 4, lines 5-11 and lines 48-55 of Galbreath). These two patents clearly demonstrate that switching between two input types, such as a voice input and a keyboard input, is old, well-known and expected in the art and clearly was not something known only to Applicant at the time of the invention disclosed in the present application.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 2-3 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hayashi (US Patent 6,271,934 B1) in view of Bernardi (US Patent 6,021,278).

Regarding claim 2: Hayashi discloses previously setting at least one user command representing a condition of an image or a direction of correction of the image (column 16, lines 19-24 of Hayashi), and at least one image correction condition corresponding to the user command (figure 12 and column 16, lines 21-24 of Hayashi); inputting the user command as a correction instruction according to the image (figure 12 ("EXEC", "USE PREVIOUS VALUE", and "NOT EXECU") and column 16,

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lines 25-31 of Hayashi); and correcting the image under the corresponding image correction condition (column 16, lines 33-42 of Hayashi) according to the user command (column 16, lines 25-31 of Hayashi).

Hayashi further discloses that a plurality of image correction conditions of different intensities are set with respect to the user command (column 16, lines 33-42 of Hayashi). The user inputs the command to either update the conversion able or use the previous value (column 16, lines 19-24 of Hayashi). The system, based on this command, updates the reference data used to correct the conversion table, said conversion table being used for copying (column 16, lines 8-14 of Hayashi). If the conversion table is updated, then the plurality of image correction conditions will clearly have different intensities since the corresponding values are different (column 17, lines 4-9 of Hayashi). Therefore, for a single user command, a plurality of image correction conditions of different intensities are set.

Hayashi further discloses that a plurality of images corrected under the image correction conditions are reproduced according to the input user command (column 14, lines 24-30 of Hayashi).

Hayashi does not disclose expressly that said user command is a verbal expression.

Bernardi discloses inputting a user command as a verbal expression (column 3, lines 21-25 of Bernardi).

Hayashi and Bernardi are combinable because they are from similar problem solving areas, namely inputting user commands into an image processing system. At the time of the invention, it would have been obvious to a person of ordinary skill in the

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art to input user commands as voice recognized verbal expressions, as taught by Bernardi, and thus previously set, input, and correct according to said commands, as taught by Hayashi. The motivation for doing so would have been to allow for remote operation of the device (column 1, lines 16-18 of Bernardi). Therefore, it would have been obvious to combine Bernardi with Hayashi to obtain the invention as specified in claim 2.

Regarding claim 3: Hayashi discloses previously setting at least one user command representing a condition of an image or a direction of correction of the image (column 16, lines 19-24 of Hayashi), and at least one image correction condition corresponding to the user command (figure 12 and column 16, lines 21-24 of Hayashi); inputting the user command as a correction instruction according to the image (figure 12 ("EXEC", "USE PREVIOUS VALUE", and "NOT EXECU") and column 16, lines 25-31 of Hayashi); and correcting the image under the corresponding image correction condition (column 16, lines 33-42 of Hayashi) according to the user command (column 16, lines 25-31 of Hayashi).

Hayashi further discloses that reference data used to correct the conversion table is repeatedly updated (column 16, lines 10-18 of Hayashi) until the user decides that the previous result is sufficient (column 16, lines 19-24 of Hayashi). Therefore, a relationship between the user command first input with respect to the image and correction of the image finally made is totalized, said totalization being the cumulative result of updating the reference data used to correct the conversion table (column 16, lines 10-24 of Hayashi). Further, since the final result of said totalization is used to correct the image

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(column 16, lines 10-14 and lines 21-24 of Hayashi), then image correction condition corresponding to the user command is updated according to a result of totalization (column 16, lines 8-14 of Hayashi).

Hayashi does not disclose expressly that said user command is a verbal expression.

Bernardi discloses inputting a user command as a verbal expression (column 3, lines 21-25 of Bernardi).

Hayashi and Bernardi are combinable because they are from similar problem solving areas, namely inputting user commands into an image processing system. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to input user commands as voice recognized verbal expressions, as taught by Bernardi, and thus previously set, input, and correct according to said commands, as taught by Hayashi. The motivation for doing so would have been to allow for remote operation of the device (column 1, lines 16-18 of Bernardi). Therefore, it would have been obvious to combine Bernardi with Hayashi to obtain the invention as specified in claim 3.

Regarding claim 7: Hayashi discloses that a condition setting algorithm of image processing is updated according to the result of the totalization (column 16, lines 8-14 of Hayashi). The reference data is used to correct the conversion table and said reference data is updated (column 8-14 of Hayashi). Therefore, a condition setting algorithm, namely the condition by which the image data is converted using said conversion table, is updated when said reference data is updated. Since said updating is performed until a desired result is achieved (column 16, lines 21-24 of Hayashi), the

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totalized result is used to update said condition setting algorithm.

4. Claims 4-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hayashi (US Patent 6,271,934 B1) in view of Bernardi (US Patent 6,021,278) and Wong (US Patent 6,557,102 B1).

Regarding claim 4: Hayashi in view of Bernardi discloses that a relationship between the verbal expression first input with respect to the image and the correction of the image finally made is totalized, as discussed above in the arguments regarding claim 3, upon which claim 4 is dependent.

Hayashi in view of Bernardi does not disclose expressly that image scenes of the images are sorted by using image characteristic values of the images and the totalization is performed for each of the image scenes sorted.

Wong discloses sorting image scenes of images (column 5, lines 29-32 of Wong) by using image characteristic values of the image (column 5, lines 49-53 and lines 57-59 of Wong).

Hayashi in view of Bernardi is combinable with Wong because they are from the same field of endeavor, namely image data processing. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to sort the images, as taught by Wong, and then perform the totalization taught by Hayashi on said sorted images. The motivation for doing so would have been to be able to determine the authenticity of an image by being able to examine the data associated with the image (column 2, lines 24-29 of Wong). Therefore, it would have been obvious to combine Wong with

Hayashi in view of Bernardi to obtain the invention as specified in claim 4.

Regarding claim 5: Hayashi in view of Bernardi discloses that a relationship between the verbal expression first input with respect to the image and the correction of the image finally made is totalized, and the image correction condition corresponding to the verbal expression is updated according to the result of totalization, as discussed above in the arguments regarding claim 3, upon which claim 5 is dependent.

Hayashi in view of Bernardi does not disclose expressly that, when the image is reproduced on a photographic print, the image is sorted according to at least one of printing method, type of printing paper, printer model, individual printer used, operator using the printer, and laboratory store concerned; and that said sorting is performed before said totalization is performed for each sorting process.

Wong discloses that, when the image is reproduced on a photographic print (column 3, lines 52-57 of Wong), the image is sorted according to at least one of printing method, type of printing paper, printer model, individual printer used, operator using the printer, and laboratory store concerned (column 5, lines 57-59 of Wong). The image is originally captured on a photographic print (column 3, line 56 of Wong) and then digitized (column 3, lines 52-57 of Wong). The digitization of the film is part of the sorting process since, when an image is scanned in (column 4, lines 60-65 of Wong), it is archived according to various image properties (column 5, lines 57-59 of Wong).

Hayashi in view of Bernardi is combinable with Wong because they are from the same field of endeavor, namely image data

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processing. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to sort the images, as taught by Wong, and then perform the totalization taught by Hayashi on said sorted images for each sorting process. The motivation for doing so would have been to be able to determine the authenticity of an image by being able to examine the data associated with the image (column 2, lines 24-29 of Wong). Therefore, it would have been obvious to combine Wong with Hayashi in view of Bernardi to obtain the invention as specified in claim 5.

5. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hayashi (US Patent 6,271,934 B1) in view of Bernardi (US Patent 6,021,278) and Hisatake (US Patent 5,669,040).

Regarding claim 6: Hayashi discloses previously setting at least one user command representing a condition of an image or a direction of correction of the image (column 16, lines 19-24 of Hayashi), and at least one image correction condition corresponding to the user command (figure 12 and column 16, lines 21-24 of Hayashi); inputting the user command as a correction instruction according to the image (figure 12 ("EXEC", "USE PREVIOUS VALUE", and "NOT EXECU") and column 16, lines 25-31 of Hayashi); and correcting the image under the corresponding image correction condition (column 16, lines 33-42 of Hayashi) according to the user command (column 16, lines 25-31 of Hayashi).

Hayashi further discloses that a plurality of image correction conditions having different image correcting algorithms are set with respect to the user command (figure 12

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and column 14, lines 19-24 of Hayashi); and image correction is performed by selecting one of the image correction conditions (column 14, lines 24-26 of Hayashi).

Hayashi does not disclose expressly that said user command is a verbal expression; that a number of times each of the image correction conditions is selected is totalized; and a priority order of each of the plurality of image correction conditions is updated according to a result of totalization.

Bernardi discloses inputting a user command as a verbal expression (column 3, lines 21-25 of Bernardi).

Hayashi and Bernardi are combinable because they are from similar problem solving areas, namely inputting user commands into an image processing system. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to input user commands as voice recognized verbal expressions, as taught by Bernardi, and thus previously set, input, and correct according to said commands, as taught by Hayashi. The motivation for doing so would have been to allow for remote operation of the device (column 1, lines 16-18 of Bernardi). Therefore, it would have been obvious to combine Bernardi with Hayashi.

Hayashi in view of Bernardi does not disclose expressly that a number of times each of the image correction conditions is selected is totalized; and a priority order of each of the plurality of image correction conditions is updated according to a result of totalization.

Hisatake discloses a number of times (figure 4a("job amount") of Hisatake) each of the image output conditions (figure 4a("copy", "fax", "print") of Hisatake) is selected is totalized (figure 4a and column 10, lines 23-30 of Hisatake);

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and a priority order of each of the plurality of image output conditions is updated according to a result of totalization (figure 4b and column 10, lines 53-58 of Hisatake).

Hayashi in view of Bernardi is combinable with Hisatake because they are from similar problem solving areas, namely the prioritization of computational operations. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to perform prioritization as taught by Hisatake on the image correction conditions taught by Hayashi. The motivation for doing so would have been to more efficiently operate a limited-capacity computational device. Therefore, it would have been obvious to combine Hisatake with Hayashi in view of Bernardi to obtain the invention as specified in claim 6.

6. Claims 8 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hayashi (US Patent 6,271,934 B1) in view of Bernardi (US Patent 6,021,278) and Enomoto (US Patent 6,034,759).

Regarding claims 8 and 13: Hayashi in view of Bernardi does not disclose expressly that density control according to a result of extraction of an essential portion is included as image processing, and recomputation of an amount of density control according to the result of extraction of the essential portion is included as an image correction according to said verbal expression.

Enomoto discloses performing density control according to a result of extraction of an essential portion (column 11, lines 45-49 of Enomoto), and recomputing an amount of density control according to the result of extraction of the essential portion (column 11, lines 50-51 and equation 1 of Enomoto). Controlling

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the exposure amount (column 11, lines 45-49 of Enomoto) inherently controls the density since the density is related to the exposure amount, as shown in detail in column 11, line 50 to column 12, line 20 of Enomoto.

Hayashi in view of Bernardi is combinable with Enomoto because they are from the same field of endeavor, namely digital image data processing. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to provide density control for the image, as taught by Enomoto. The motivation for doing so would have been provide optimal printing for the principal portion of the image (column 1, lines 46-49 of Enomoto). Therefore, it would have been obvious to combine Enomoto with Hayashi in view of Bernardi to obtain the invention as specified in claims 8 and 13.

7. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hayashi (US Patent 6,271,934 B1) in view of Bernardi (US Patent 6,021,278) and well-know prior art.

Regarding claim 9: Hayashi discloses previously setting at least one user command representing a condition of an image or a direction of correction of the image (column 16, lines 19-24 of Hayashi), and at least one image correction condition corresponding to the user command (figure 12 and column 16, lines 21-24 of Hayashi); inputting the user command as a correction instruction according to the image (figure 12 ("EXEC", "USE PREVIOUS VALUE", and "NOT EXECU") and column 16, lines 25-31 of Hayashi); and correcting the image under the corresponding image correction condition (column 16, lines 33-42 of Hayashi) according to the user command (column 16, lines 25-31 of Hayashi).

Hayashi further discloses a numerical input mode to input the correction instruction (figure 11 and column 14, lines 11-18 of Hayashi).

Hayashi does not disclose expressly that said user command is a verbal expression; and that, in correction processing of the image, switching is performed between a verbal input mode for inputting the verbal expression and a numerical input mode to input the correction instruction.

Bernardi discloses a verbal input mode for inputting the verbal expression (column 3, lines 21-25 of Bernardi).

Hayashi and Bernardi are combinable because they are from similar problem solving areas, namely inputting user commands into an image processing system. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to input user commands as voice recognized verbal expressions, as taught by Bernardi. The motivation for doing so would have been to allow for remote operation of the device (column 1, lines 16-18 of Bernardi). Therefore, it would have been obvious to combine Bernardi with Hayashi.

Hayashi in view of Bernardi does not disclose expressly that switching is performed between said verbal input mode and said numerical input mode.

Official notice is given that switching between two modes of input is old, well-known and expected in the art. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to switch between said verbal input mode taught by Bernardi and said numerical input mode taught by Hayashi. The motivation for doing so would have been to have multiple possible ways of entering data, depending upon user

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preference, in case one form of input does not work well for a particular user or in particular circumstances.

8. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hayashi (US Patent 6,271,934 B1) in view of Bernardi (US Patent 6,021,278) and Higurashi (US Patent 6,011,896).

Regarding claim 10: Hayashi in view of Bernardi does not disclose expressly that said totalization is performed with respect to a predetermined number of frames.

Higurashi discloses performing error correction for a predetermined number of frames (column 5, lines 5-7 of Higurashi).

Hayashi in view of Bernardi is combinable with Higurashi because they are from the same field of endeavor, namely digital image data processing and correction. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to perform error correction for a predetermined number of frames, as taught by Higurashi, said error correction being the totalization taught by Hayashi. The motivation for doing so would have been that a predetermined number of frames should be used due to a limited amount of available memory in a practical system (figure 1 and column 1, line 63 to column 2, line 1 of Higurashi). Therefore, it would have been obvious to combine Higurashi with Hayashi in view of Bernardi to obtain the invention as specified in claim 10.

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9. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hayashi (US Patent 6,271,934 B1) in view of Bernardi (US Patent 6,021,278), Wong (US Patent 6,557,102 B1), and Kashiyama (US Patent 6,295,415 B1).

Regarding claim 11: Hayashi in view of Bernardi and Wong does not disclose expressly that the image scenes are sorted between ordinary scenes, overexposure scenes, and underexposure scenes.

Kashiyama discloses sorting image scenes between ordinary scenes, overexposure scenes, and underexposure scenes (figure 3 and column 6, lines 9-13 of Kashiyama).

Hayashi in view of Bernardi and Wong is combinable with Kashiyama because they are from the same field of endeavor, namely digital image data processing and correction. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to sort image scenes according to the teachings of Kashiyama. The motivation for doing so would have been to be able to obtain different exposures rates for a picture as desired by the operator (column 1, lines 33-41 of Kashiyama). Therefore, it would have been obvious to combine Kashiyama with Hayashi in view of Bernardi and Wong to obtain the invention as specified in claim 11.

10. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hayashi (US Patent 6,271,934 B1) in view of Bernardi (US Patent 6,021,278), Wong (US Patent 6,557,102 B1), Kashiyama (US Patent 6,295,415 B1), and obvious engineering design choice.

Regarding claim 12: Hayashi in view of Bernardi and Wong does not disclose expressly that the image scenes are sorted

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between portraits, scenery, night views, underexposure scenes, and high contrast scenes.

Kashiyama discloses sorting image scenes based on exposure data, including underexposure scenes (figure 3 and column 6, lines 9-13 of Kashiyama).

Hayashi in view of Bernardi and Wong is combinable with Kashiyama because they are from the same field of endeavor, namely digital image data processing and correction. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to sort image scenes according to the teachings of Kashiyama. The motivation for doing so would have been to be able to obtain different exposures rates for a picture as desired by the operator (column 1, lines 33-41 of Kashiyama). Therefore, it would have been obvious to combine Kashiyama with Hayashi in view of Bernardi and Wong.

It would have been an obvious engineering design choice to organize the exposure categories taught by Kashiyama specifically into categories of portraits, scenery, night views, underexposure scenes, and high contrast scenes, each of said categories requiring different exposure rates in order to obtain a pleasing resultant picture. The obvious advantage of such a specific organization is to allow the user to obtain a specifically desired print for a specifically desired type of picture, each type requiring a different exposure rate (column 1, lines 33-41 of Kashiyama) due to the lighting conditions, among others. Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system taught by Hayashi in view of Bernardi, Wong and Kashiyama to provide for the aforementioned specific categories.

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11. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hayashi (US Patent 6,271,934 B1) in view of Bernardi (US Patent 6,021,278), Hisatake (US Patent 5,669,040), and Enomoto (US Patent 6,034,759).

Regarding claim 14: Hayashi in view of Bernardi and Hisatake does not disclose expressly that density control according to a result of extraction of an essential portion is included as image processing, and recomputation of an amount of density control according to the result of extraction of the essential portion is included as an image correction according to said verbal expression.

Enomoto discloses performing density control according to a result of extraction of an essential portion (column 11, lines 45-49 of Enomoto), and recomputing an amount of density control according to the result of extraction of the essential portion (column 11, lines 50-51 and equation 1 of Enomoto). Controlling the exposure amount (column 11, lines 45-49 of Enomoto) inherently controls the density since the density is related to the exposure amount, as shown in detail in column 11, line 50 to column 12, line 20 of Enomoto.

Hayashi in view of Bernardi and Hisatake is combinable with Enomoto because they are from the same field of endeavor, namely digital image data processing. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to provide density control for the image, as taught by Enomoto. The motivation for doing so would have been provide optimal printing for the principal portion of the image (column 1, lines 46-49 of Enomoto). Therefore, it would have been obvious to combine Enomoto with Hayashi in view of Bernardi and Hisatake to obtain the invention as specified in claim 14.

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12. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hayashi (US Patent 6,271,934 B1) in view of Bernardi (US Patent 6,021,278), well-known prior art, and Enomoto (US Patent 6,034,759).

Regarding claim 15: Hayashi in view of Bernardi and well-known prior art does not disclose expressly that density control according to a result of extraction of an essential portion is included as image processing, and recomputation of an amount of density control according to the result of extraction of the essential portion is included as an image correction according to said verbal expression.

Enomoto discloses performing density control according to a result of extraction of an essential portion (column 11, lines 45-49 of Enomoto), and recomputing an amount of density control according to the result of extraction of the essential portion (column 11, lines 50-51 and equation 1 of Enomoto). Controlling the exposure amount (column 11, lines 45-49 of Enomoto) inherently controls the density since the density is related to the exposure amount, as shown in detail in column 11, line 50 to column 12, line 20 of Enomoto.

Hayashi in view of Bernardi and well-known prior art is combinable with Enomoto because they are from the same field of endeavor, namely digital image data processing. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to provide density control for the image, as taught by Enomoto. The motivation for doing so would have been provide optimal printing for the principal portion of the image (column 1, lines 46-49 of Enomoto). Therefore, it would have been obvious to combine Enomoto with Hayashi in view

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of Bernardi and well-known prior art to obtain the invention as specified in claim 15.

Conclusion

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James A. Thompson whose telephone number is 571-272-7441. The examiner can normally be reached on 8:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David K. Moore can be reached on 571-272-7437. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

James A. Thompson
Examiner
Art Unit 2624

JAT
18 June 2005



Thomas D.
~~THOMPSON~~
PRIMARY EXAMINER